METHOD AND SYSTEM FOR OPTIMIZING CODE USING AN OPTIMIZING COPROCESSOR

Abstract of the Disclosure

A data processing system includes a central processing unit (CPU) in communication with a system memory. Within the system memory, there is stored legacy code that does not utilize the full features of the CPU. The data processing system also includes a code-optimizing coprocessor in communication with the CPU and the system memory. Control logic within the code-optimizing coprocessor causes the code-optimizing coprocessor to generate optimized code from the legacy code at the same time the CPU executes the legacy code, such that the optimized code is tailored according to the CPU. After the code-optimizing coprocessor has generated at least some optimized code, the code-optimizing coprocessor causes the CPU to automatically utilize at least some optimized code in lieu of at least some of the legacy code.

Figures